

Brown Marmorated Stink Bug Control Options

| *Chemicals listed alphabetically by common name, Trade name G = general use R = restricted use | | acephate, Orthene [G] | beta-cyfluthrin, Baythroid XL [R] | bifenthrin, Brigade [R] | bifenthrin and zeta cypermethrin, Hero [R] | chlorpyrifos, Lorspan [R] | dimethoate, Dimate [G] | endosulfan, Venom [G] | estfenvalerate, Asana XL [R] | tubenprathrin, Dantrol [R] | imidacloprid, Admiral/Provado (foliar) [G] | lambda cyhalothrin, Warrior [R] | methidathion, Cythion [G] | methomyl, Lamate [R] | permethrin, Ambush/Pounce [R] | zeta-cypermethrin, Mustang [R] |
|---|---|------------------------------|-----------------------------------|-------------------------|--|---------------------------|------------------------|-----------------------|------------------------------|----------------------------|--|---------------------------------|---------------------------|----------------------|-------------------------------|--------------------------------|
| | | azinphos-methyl, Guthion [R] | bifenthrin, Baythroid XL [R] | bifenthrin, Brigade [R] | bifenthrin and zeta cypermethrin, Hero [R] | chlorpyrifos, Lorspan [R] | dimethoate, Dimate [G] | endosulfan, Venom [G] | estfenvalerate, Asana XL [R] | tubenprathrin, Dantrol [R] | imidacloprid, Admiral/Provado (foliar) [G] | lambda cyhalothrin, Warrior [R] | methidathion, Cythion [G] | methomyl, Lamate [R] | permethrin, Ambush/Pounce [R] | zeta-cypermethrin, Mustang [R] |
| Field Crops | | | | | | | | | | | | | | | | |
| Alfalfa | | g | | | f-g | g | | | | | | f-g | f-g | f-g | | f |
| Barley | | g | | | | | | | | | | f-g | f-g | f-g | f-g | |
| Corn - field | | g | g | p | f-g | g | p-f | | | p | | f-g | f-g | f-g | | f |
| Sorghum | | g | | | f-g | g | p-f | | | | | g | f | f | | f |
| Soybeans | g | g | g | f-g | f-g | g | p-f | | | | | f-g | f-g | f | | f |
| Wheat | | g | | | f-g | g | | | | | | f-g | f-g | g | | f |
| Tobacco | | g | | f-g | u | | g | | | p | | f | f-g | | f-g | f |
| Grass Hay | | | | u | | | | | | | | f-g | | | | |
| Vegetable Crops | | | | | | | | | | | | | | | | |
| Asparagus | | | | u | f-g | f-g | | | | | | | | g | f-g | |
| Beans, Snap | | | f-g | f-g | p-f | f-g | p-f | | | f | f-g | f-g | | g | | f |
| Beans, Lima | g | | f-g | f-g | p | f-g | | | | f | f-g | f-g | | g | | f |
| Beets | | | | | | | | | | | | f-g | | g | f-g | f |
| Broccoli | | g | f-g | f-g | p | f-g | p-f | | | f | f-g | f-g | | f-g | f-g | f |
| Brussel Sprouts | | g | f-g | f-g | p | f-g | | | | f | f-g | f-g | | f-g | f-g | f |
| Cabbage | | g | f | f-g | p | f-g | p-f | | | f | f-g | f-g | | f-g | f-g | f |
| Cauliflower | | g | f | f-g | p | f-g | p-f | | | f | f-g | f-g | | f-g | f-g | f |
| Collards | | g | f | f-g | p | f-g | p-f | | | f | f-g | | | g | | f |
| Kale | | g | f-g | f-g | p | f-g | | | | f | f-g | f-g | | f-g | f-g | f |
| Carrots | | g | f | | | | p-f | | | f | | f-g | | f-g | f-g | f |
| Celery | | g | | u | | | | | | f | | f-g | | f-g | f | f-g |
| Cucumber | | g | f-g | f-g | p-f | | g | p-f | f-g | | f | f-g | g | f-g | f-g | f-g |
| Eggplant | | g | f-g | f-g | p | f-g | p-f | | | f | f-g | f-g | g | f-g | f-g | f |
| Garlic | | g | | | | | | | | | | f-g | | f-g | | |
| Greens, mustard/turnip | | g | f-g | f-g | u | f-g | p-f | | | f | f-g | f-g | | f-g | f-g | f |
| Horseradish | | g | f-g | | | | | | | f | | f-g | | f-g | f-g | f |
| Leeks | | g | | | | | | | | | | f-g | | | | |
| Lettuce | g | g | f-g | f-g | u | f-g | p-f | | | f | f-g | f-g | g | f | f-g | f |
| Muskmelons | | | f-g | f-g | | f-g | | | | f | f-g | g | | | f-g | f-g |
| Okra | | g | f-g | f-g | u | | | | | f | | g | | | | f |
| Onions | | g | | | | | | | | | | f-g | | f-g | f | f |
| Peas | | | f-g | | f-g | p | | p-f | f | | | f-g | g | | | f |
| Peppers | g | g | f-g | f-g | p-f | g | p-f | f | f | f | f-g | g | g | f-g | f-g | f-g |
| Pumpkins | | g | f-g | f-g | p | | g | p-f | f-g | | | f-g | g | f-g | f-g | f-g |
| Winter Squash | | g | f-g | f-g | p-f | | g | p-f | f-g | | | f-g | g | f-g | f-g | f-g |
| Radishes | | g | f-g | | | | p-f | | | f | | f-g | | | | f |
| Rutabaga | | | f-g | | | | | | | f | | | | | f-g | f |
| Spinach | | g | f-g | f-g | u | | | | | f | | f-g | f-g | f | f-g | f |
| Summer Squash | | g | f-g | f-g | p-f | | g | p-f | f | | | f-g | g | f-g | f-g | f |
| Sweet Corn | | g | | f-g | p | f-g | p-f | | | p | | f-g | f-g | f | | f |
| Sweet Potatoes | | g | f-g | f-g | u | u | | | | f | | f-g | f-g | | f-g | f |
| Tomatoes | | g | f-g | f-g | p-f | g | p-f | f | f | f | f-g | g | g | f-g | f-g | f |
| Watermelons | | g | f-g | f-g | u | g | p-f | f | f | f | f-g | g | g | f | f-g | f |
| White Potatoes | | g | f-g | f-g | u | f-g | p-f | | | f | | f-g | g | f-g | f | |
| Gourds | | g | f-g | f-g | p | | | | | f | | f-g | g | f | f-g | f |
| Rape | | g | f-g | f-g | u | | | | | f | | f-g | | f-g | f-g | f |
| Fruit | | | | | | | | | | | | | | | | |
| Apple | | g | g | | | f-g | g-e | p-f | f-g | p | f | f-g | f-g | f | f-g | f |
| Blackberry | | f-g | | | | | | p-f | f | | | | | f-g | f | |
| Blueberry | | | | | | | | p-f | f | | | | | f-g | f | |
| Cherry | | f-g | g | | | f-g | g-e | p-f | f | p | | f-g | f-g | f | f-g | f |
| Grape | | f-g | g | f-g | f-g | | | | f | | | f-g | | | f-g | f |
| Peaches | | g | g | | | f-g | g-e | p-f | f-g | p | f | f-g | g | f | f-g | f |
| Pear | | f-g | g | | | f-g | g-e | p-f | f-g | p | f | f-g | g | f | f-g | f |
| Plum | | f-g | g | | | f-g | g-e | p-f | f-g | p | | f-g | | f-g | f | f |
| Raspberry | | f-g | | | | | | p-f | f | | | | | | f | f |
| Strawberry | | | | | | | | | f | | | f-g | | | f-g | f |

e= excellent control

g= good control

f= fair control

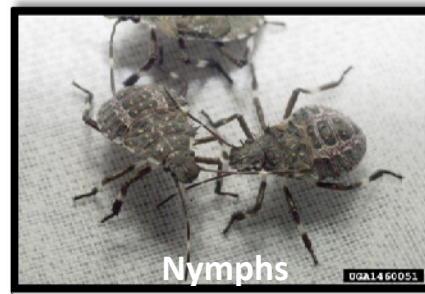
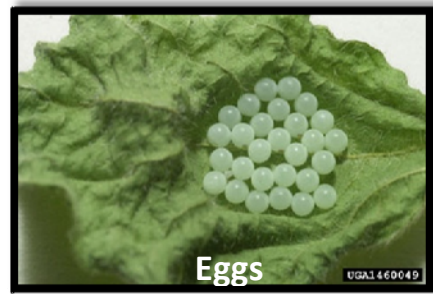
p= poor control

u= unknown

Ratings based on limited number of lab and green house trials. Efficacy ratings may change after the 2011 field season.

Trials usually used higher rates of insecticides and at the higher gallonages/acre.

Life Cycle of the Brown Marmorated Stink Bug



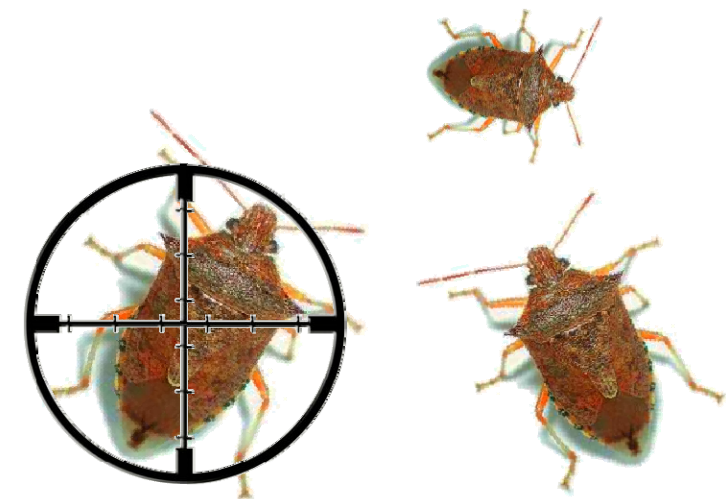
The Brown Marmorated Stink bug, *Halyomorpha halys*; is native to China, Japan, Korea, and Taiwan. It was reported in Allentown, PA in 2001 and has since spread to Maryland along with most of the other Mid-Atlantic/Northeastern States.

Adults emerge in the spring depending on temperature, then mate and lay eggs May through August. The light green/whitish clusters of eggs hatch into yellowish/brown mottled with red and black nymphs that go through 5 molts. Adults move to overwintering sites (woods, brushy areas, and buildings) in October/November. Varying times of breeding/egg laying can result in prolonged feeding damage. The extended emergence, egg laying, and hatching can result in the need for multiple treatments or pesticide applications. Above photos courtesy of David R. Lance, APHIS Entomologist.

Brown Marmorated Stink Bug Control Options

The following table contains most of the crops grown in Maryland on the Y axis and most of the insecticides that will provide some degree of control on the X axis. Some of the insecticides do not have BMSB on the label, but the crop is labeled. According to Dr. Galen Dively, Advisor Consultant & Extension Specialist, Integrated Pest Management; Dr. Cerruti Hooks, Assistant Professor & Extension Specialist, Integrated Pest Management; and Dr. Gerald Brust, Agent & Regional Extension Specialist, Vegetables; they have activity on BMSB and their control rating is listed in the table. For life cycle information, please see pictures on the back page. Always follow the label and use pesticides safely. The user is always responsible for the proper use of pesticides, residue on crops, storage and disposal, as well as damage caused by drift. State and Federal pesticide regulations and labels are continuously being revised. Be sure to follow current regulations and labels. Using pesticides inconsistent with labeled directions is illegal. The trade or brand names given herein are supplied with the understanding that no discrimination is intended and no endorsement by the University of MD Extension is implied.

Furthermore, in some instances the same compound may be sold under different trade names, which may vary as to label clearances. It is the user's responsibility to follow the label.



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